



**PATENT**  
Attorney Docket No. 72182 RMS  
Dorsey File No. 470425-15

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

In re application of:

Dratz et al.

Serial No.: 10/623,447

Filing Date: July 18, 2003

For: **NOVEL ZWITTERIONIC FLUORESCENT  
DYES FOR LABELING IN PROTEOMIC  
AND OTHER BIOLOGICAL ANALYSES**

Examiner: To Be Assigned

Art Unit: 1644

**CERTIFICATE OF MAILING**

I hereby certify that this correspondence, including listed enclosures, is being deposited with the United States Postal Service as First Class Mail in an envelope addressed to: Commissioner for Patents, Mail Stop Amendment, P.O. Box 1450, Alexandria, VA 22313-1450 on:

Dated: April 11, 2006

Signed: Victoria L. Poulsen  
Victoria Linne Poulsen

**INFORMATION DISCLOSURE STATEMENT**

Mail Stop Amendment  
-Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Sir:

In satisfaction of the duty of disclosure under 37 C.F.R. § 1.56, and in accordance with the provisions of 37 C.F.R. §§ 1.97 and 1.98, Applicants wish to draw the attention of the U.S. Patent and Trademark Office to the references cited on the accompanying form PTO/SB/8A. In accordance with 1287 Off. Gaz. Pat. Office 163, 10/19/2004, no copies of U.S. patents and U.S. published applications are enclosed. Copies of all other references are enclosed.

Nothing herein shall constitute an admission concerning the contents of any of the cited references, nor shall the inclusion of a reference herein be considered an admission that the reference constitutes prior art against the invention claimed in the above-identified application. Submission of the present document shall not be construed as an admission that a search has been made or that better art does not exist, and to the knowledge of the undersigned.

Further, in accordance with the provisions of 37 C.F.R. §§ 1.97(c) and 1.97(e)(1), the undersigned certifies that the references listed on the enclosed substitute for form PTO-1449 marked with the symbol (†) were first cited in an International Search Report dated November 3, 2003, for counterpart

Serial No.: 10/623,447  
Filing Date: July 18, 2003

PCT application PCT/03/22397. A copy of the International Search Report for the counterpart PCT application is enclosed herewith.

Further, in satisfaction of the duty of disclosure under 37 C.F.R. § 1.56, and as required by M.P.E.P. § 2001.06(b), Applicant notes that the present application is related to the following pending patent applications:

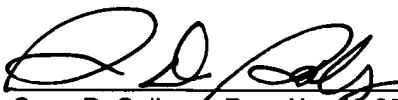
1. U.S.S.N. 10/761818, filed January 20, 2004.

As far as is known to the undersigned, this Information Disclosure Statement is being filed within three months of the filing date of a national application, within three months of the date of entry of the national state in an international application, or before the mailing date of a first Office Action on the merits as set forth in 37 C.F.R. § 1.97(b), and therefore no fee is required.

Respectfully submitted,  
DORSEY & WHITNEY LLP

Dated: April 11, 2006  
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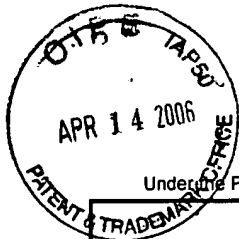
By:

  
Sean D. Solberg, Reg. No. 48,653  
for Robin M. Silva, Reg. No. 38,304

*Filed Under 37 C.F.R. § 1.34*

Attachments: Form PTO/SB/8A-B, Substitute for form PTO 1449  
Copy of International Search Report  
Copies of 17 cited references  
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Substitute PTO/SB/08A (07-05)

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Substitute for form 1449A/PTO  
(Modified)

## INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(use as many sheets as necessary)

Sheet

1

of

2

### Complete if Known

Application Number	10/623,447
Filing Date	July 18, 2003
First Named Inventor	Dratz et al.
Art Unit	1644
Examiner Name	To be assigned
Attorney Docket Number	Docket A-72182 470425-15

### U.S. PATENT DOCUMENTS

Examiner Initials*	Cite No. <sup>1</sup>	Document Number Number-Kind Code <sup>2</sup> (if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
	A1	US-4774339	09/27/1988	Haugland et al.	
	A2	US-			
	A3	US-			
	A4	US-			
	A5	US-			
	A6	US-			
	A7	US-			
	A8	US-			
	A9	US-			
	A10	US-			

### FOREIGN PATENT DOCUMENTS

Examiner Initials*	Cite No. <sup>1</sup>	Foreign Patent Document Country Code <sup>2</sup> Number <sup>3</sup> Kind Code <sup>5</sup> (if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T <sup>6</sup>
	B1					

### NON PATENT LITERATURE DOCUMENTS

Examiner Initials*	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T <sup>6</sup>
	C1	Berggren, K., et al., (2000) Background-free, high sensitivity staining of proteins in one- and two-dimensional sodium dodecyl sulfate-polyacrylamide gels using a luminescent ruthenium complex, <i>Electrophoresis</i> 21, 2509-2521	
	C2	Corthals, G. L., et al., (2000) The dynamic range of protein expression: a challenge for proteomic research, <i>Electrophoresis</i> 21: 1104-1115	
	C3 †	Database CAPLUS on STN, AN 2001:584663, WANG et al., "Optical Recording Properties of a Novel Subphthalocyanine Thin Film", <i>Physica Status Solid A: Applied Research</i> , 2001, Vol. 186, No. 1, pages 71-77, Abstract	
	C4	Gygi, S. P., et al., (1999) Quantitative analysis of complex protein mixtures using isotope-coded affinity tags, <i>Nat. Biotechnol.</i> 17: 994-999	
	C5	Gygi, S. P., et al., (2000) Evaluation of two-dimensional gel electrophoresis-based proteome analysis technology, <i>Proc. Natl. Acad. Sci. U.S.A</i> 97: 9390-9395	
	C6	Harry, J. L., et al., (2000) Proteomics: capacity versus utility, <i>Electrophoresis</i> 21: 1071-1081	

Examiner Signature	Date Considered
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\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. <sup>1</sup> Applicant's unique citation designation number (optional). <sup>2</sup> See Kinds Codes of USPTO Patent Documents at [www.uspto.gov](http://www.uspto.gov) or MPEP 901.04. <sup>3</sup> Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). <sup>4</sup> For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. <sup>5</sup> Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. <sup>6</sup> Applicant is to place a check mark here if English Language Translation is attached.

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Substitute for form 1449A/PTO (Modified)  <b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b>  (use as many sheets as necessary)			<b>Complete if Known</b>		
			Application Number	10/623,447	
			Filing Date	July 18, 2003	
			First Named Inventor	Dratz et al.	
			Art Unit	1644	
			Examiner Name	To be assigned	
Sheet	2	of	2	Attorney Docket Number	Docket A-72182 470425-15

NON PATENT LITERATURE DOCUMENTS			
Examiner Initials*	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T <sup>6</sup>
	C7	Haugland, R. P. and Kang, H. C. Chemically Reactive DipyrrometheneBoron Difluoride Dyes, <i>Molecular Probes, Inc.</i> 83,458[4,774,339], 1-14. 1988	
	C8	Johnson, I. D., et al., (1991), Fluorescent membrane probes incorporating dipyrrometheneboron difluoride fluorophores, <i>Anal.Biochem</i> 198: 228-237	
	C9	Karolin, J., et al., (1994) Fluorescence and absorption spectroscopic properties of dipyrrometheneboron difluoride (BODIPY) derivatives in liquids, lipid membranes, and proteins, <i>J.Am.Chem.Soc.</i> 116: 7801-7806	
	C10	King et al., (1996) "Alkyl 2,2,2-Trifluoroethanesulfonates (Tresylates): Elimination-Addition vs. Bimolecular Nucleophilic Substitution in Reactions with Nucleophiles in Aqueous Media" <i>J. Org. Chem.</i> 61,7250-7255	
	C11	Matthew, J. B., et al., (1985) pH-dependent processes in proteins, <i>CRC Crit.Rev.Biochem</i> 18: 91-197	
	C12	McNamara P., et al., (2000) Fluorescent gel imaging with Typhoon 8600: <i>Life Science News</i>	
	C13	Patton, W. F. (2000) A thousand points of light: the application of fluorescence detection technologies to two-dimensional gel electrophoresis and proteomics <i>Electrophoresis</i> 21: 1123-1144	
	C14	Rabilloud, T., (2000) Detecting proteins separated by 2-D gel electrophoresis, <i>Anal.Chem.</i> 72: 48A-55A	
	C15	Tanford, C. (1962) The interpretation of hydrogen ion titration curves of proteins. <i>Adv.Protein Chem.</i> 17: 69-165	
	C16	Unlu, M., et al., (1997) Difference gel electrophoresis: a single gel method for detecting changes in protein extracts, <i>Electrophoresis</i> 18: 2071-2077	
	C17	Vos de Wael, E., et al., (1977) Pyromethene-BF <sub>2</sub> complexes (4,4"-difluoro-4-bora-3a,4a-diaza-s-indacenes), Synthesis and luminescence properties, <i>Recl.Trav.Chim.Pays-Bas</i> 96: 306-309	

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Examiner Signature	Date Considered
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